

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 February 2004 (12.02.2004)

PCT

(10) International Publication Number
WO 2004/013631 A3

(51) International Patent Classification⁷: G01N 33/574,
C07K 14/47

(DE). MARTIN, Peter [DE/DE]; Buchensteige 4,
69251 Gaiberg (DE). HERKERT, Matthias [DE/DE];
Lutherstrasse 61, 69120 Heidelberg (DE). REICHERT,
Anja [DE/DE]; Oderweg 11, 69226 Nußloch (DE).
TRUNK-GEHMACHER, Marcus [DE/DE]; Bergheimer
Strasse 132, 69115 Heidelberg (DE).

(21) International Application Number:
PCT/EP2003/050318

(74) Common Representative: MTM LABORATORIES
AG; Im Neuenheimer Feld 583, 69120 Heidelberg (DE).

(22) International Filing Date: 17 July 2003 (17.07.2003)

(81) Designated States (national): JP, US.

(25) Filing Language: English

Published:

(26) Publication Language: English

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(30) Priority Data:

02017069.2	29 July 2002 (29.07.2002)	EP
02017058.5	29 July 2002 (29.07.2002)	EP

(88) Date of publication of the international search report:
1 April 2004

(71) Applicant (for all designated States except US): MTM
LABORATORIES AG [DE/DE]; Im Neuenheimer Feld
583, 69120 Heidelberg (DE).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors; and

(75) Inventors/Applicants (for US only): RIDDER, Rüdiger
[DE/DE]; Untere Kippstrasse 5b, 69198 Schriesheim

WO 2004/013631 A3

(54) Title: COMPOSITIONS AND METHODS FOR DIAGNOSIS AND THERAPY OF CANCER

(57) **Abstract:** The present invention relates to a method for improved diagnosis of cervical lesions based on detection of gene products encoded by the INK4a gene locus. According to the present invention an improvement in diagnosis may be achieved by assessing the presence or absence or the level of overexpression of at least two different gene products encoded by the INK4a gene locus. In another aspect the present invention relates to peptides derived from cell cycle regulatory proteins, the expression of which is altered in association with tumors in individuals. These peptides according to the present invention may be used for detection and therapy of tumors. For detection purposes the peptides may for example be used to detect antibodies directed against said peptides. In therapeutic respect the peptides may be used for immunotherapy or vaccination approaches. In therapeutic and diagnostic respect the peptides may be used in combination with one or more peptides derived from tumor associated proteins.